

**REMARKS**

Claims 1, 2, 6, and 11 are pending in this application. By this Amendment, claims 1, 6, and 11 are amended, and claims 3 and 4 are cancelled without prejudice to or disclaimer of the subject matter contained therein. Support for the amendments to claims 1, 6 and 11 can be found, at least, at page 6 lines 2-8 and page 6 line 25 to Page 7 line 2 of the specification. Thus, no new matter is added.

**I. 35 U.S.C. §112 Rejection**

The Office Action rejects claims 6 and 11 under 35 U.S.C. §112 second paragraph as allegedly being indefinite. By this Amendment, claims 6 and 11 are amended responsive to the rejection.

Accordingly, Applicants respectfully request withdrawal of the rejection.

**II. 35 U.S.C. §103 Rejections**

The Office Action rejects claims 1, 2 and 11 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,479,193 to Maeda et al. (hereinafter "Maeda"), in view of U.S. Patent Application Publication No. 2003/0044576 to Dhar et al. (hereinafter "Dhar"); rejects claims 1-4 and 11 under 35 U.S.C. §103(a) as being unpatentable over Maeda in view of Dhar and further in view of U.S. Patent No. 5,898,511 to Mizutani et al. (hereinafter "Mizutani"); and rejects 1-4, 6 and 11 under 35 U.S.C. §103(a) as being unpatentable over Maeda in view of Dhar and Mizutani and further in view of U.S. Patent Application Publication No. 2003/0148039 to Blum et al (hereinafter "Blum") and U.S. Patent Application Publication No. 2002/0030360 to Herrmann et al. (hereinafter "Herrmann"). These rejection are respectfully traversed.

The applied references taken alone or in combination fail to disclose or render obvious "a thickness of the photopolymer layer in the thickest portion is 5 micrometers to 8

micrometers," as recited in independent claim 1 and similarly recited in independent claims 6 and 11.

The Office Action relies on Dhar and Mizutani as disclosing this feature, however, Dhar discloses at paragraph 81 a thickness of the adherent as .2 millimeters to 2 millimeters "200 micrometers to 2,000 micrometers." The Office Action also alleges that Mizutani discloses a sealing agent for 10 to 40 micron thick holograms having a thickness of 50 microns. However, neither of the ranges disclosed in Dhar or Mizutani correspond to the claim range nor the ranges of Dhar and Mizutani even overlap the claimed range. The remaining references fail to at least cure this deficiency of Maeda, Dhar and Mizutani.

In addition, the applied references alone or in combination fail to disclose or render obvious that the hybrid material layer and the photopolymer layer are formed between the first and second substrate and that both the first and second substrate are composed of a material that is "optically flat and transparent to the wavelength of a laser beam for use in holographic recording and reproduction," as recited in independent claim 1 and similarly recited in independent claims 6 and 11.

In particular, Maeda discloses a recording material 17 in Fig. 2, however, as shown in Fig. 2 this recorded material 17 is disposed on a liquid 18 on a mirror 19 and does have a substrate disposed on either side. The Office Action alleges that Dhar discloses the substrate of independent claim 1 in Figs. 6C, 6D and 6E. However, as shown in these figures, the substrate 24 is not "optically flat" but rather has a wavy inner surface. The remaining references fail to at least cure this deficiency of Maeda and Dhar.

For at least the above reasons, independent claim 1 is patentable over the applied combination of references. Independent claims 6 and 11 are patentable at least for the similar features they recite. Claim 2 is also patentable at least for its dependency from independent

claim 1 and as well as for the additional features it recites. By this Amendment claims 3 and 4 are cancelled thereby rendering the rejections of those claims moot.

Accordingly, Applicants respectfully request withdrawal of the rejections.

**III. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff  
Registration No. 27,075

Eric D. Morehouse  
Registration No. 38,565

JAO:LCS/amt

**Attachments:**

Request for Continued Examination  
Petition for Extension of Time

Date: June 8, 2009

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 320850**  
**Alexandria, Virginia 22320-4850**  
**Telephone: (703) 836-6400**

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